

INVESTIGATOR'S ANNUAL REPORT

National Park Service

All or some of the information provided may be available to the public

Reporting Year: 1997	Park: Shenandoah NP						
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Additional investigators or key field assistants (first name, last name, office phone, office email): <table> <tr> <td>Name: Michael Shackelford</td> <td>Phone: n/a</td> <td>Email: n/a</td> </tr> <tr> <td>Name: Marge Kennedy</td> <td>Phone: n/a</td> <td>Email: n/a</td> </tr> </table>		Name: Michael Shackelford	Phone: n/a	Email: n/a	Name: Marge Kennedy	Phone: n/a	Email: n/a
Name: Michael Shackelford	Phone: n/a	Email: n/a					
Name: Marge Kennedy	Phone: n/a	Email: n/a					
Permit#: SHEN1997AUKT							
Park-assigned Study Id. #: unknown							
Project Title: Impact Of Acid Rain On Geologically Sensitive Watersheds (N-84)							
Permit Start Date: Jan 01, 1998	Permit Expiration Date Jan 01, 1998						
Study Start Date: Jan 01, 1997	Study End Date Jan 01, 1997						
Study Status: Completed							
Activity Type: Research							
Subject/Discipline: Geochemistry (inc. Minerals / Petrology)							
Objectives: <p>To elucidate and quantify the watershed processes that regulate the composition of natural waters and document the impacts of acid rain on those processes.;To provide long-term measurements of the chemistry of atmospheric deposition and surface water chemistry, and to identify trends or changes in each of these media.;To provide a long-term baseline of quality assured data on the major ion chemistry of atmospheric deposition and surface water chemistry for future reference.</p>							
Findings and Status: <p>In 1997 we were asked to prepare a proposal for continuing the investigations at Old Rag. This proposal was submitted, but authorization for continued work was not received until late in the fiscal year. In the meantime, we coordinated plans for further research and monitoring with Personnel from the University of Virginia (Jeff Raffensberger and George Hornberger). Sites for collection of atmospheric deposition and streamwater, and for continuous stream flow monitoring are being reestablished. Further work on the detailed mineralogy of saprolite and bedrock is being pursued as a MS project. Work on the detailed mineralogy of saprolite and bedrock is being pursued a MS project by a student from UVA and USGS personnel. Old Rag nitrate data (1982 - 1992) is being used in a coop regional (Mid-Atlantic) study of nitrate mass-balance from forested watershed.</p>							
For this study, were one or more specimens collected and removed from the park but not destroyed during analyses? No							
Funding provided this reporting year by NPS: 0	Funding provided this reporting year by other sources: 10000						
Fill out the following ONLY IF the National Park Service supported this project in this reporting year by providing money to a university or college							
Full name of college or university:	Annual funding provided by NPS to university or college this reporting						

n/a	year: 0
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